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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,895	07/09/2003	Franklin B. Jones	CPW-001	9857

32836 7590 07/15/2004

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EXAMINER
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COMAS, YAHVEH

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/615,895	JONES ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Yahveh Comas	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

The objection to the drawings under 37 CFR 1.83 (a) regarding the permanent magnets rotor is withdrawn.

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground of rejection.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bowman-Manifold U.S. Patent No. 2,108,523.

Bowman discloses a electromagnetic coil system comprising first coil (A) having longitudinal sections, circumferential section and a thickness, each of the longitudinal sections of the first coil having a width forming a portion of the first cylindrical surface, the longitudinal section and circumferential section of the first coil defining substantially rectangular opening; and a second coil (B) having longitudinal sections, circumferential section and a thickness, each of the longitudinal sections of the second coil having a width forming a portion of the first cylindrical surface, the longitudinal section and circumferential section of the second coil defining substantially rectangular opening, the widths of the longitudinal sections of the first and second coils being greater than respective thickness of the first and second coils, one of the longitudinal sections of the

first coil being at least partially disposed in the rectangular opening of the second coil and one of the longitudinal section of the second being at least partially disposed in the rectangular opening of the first coil (for example see fig. 2 and fig. 3).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kessinger, Jr. et al. U.S. Patent No. 5,744,896 in view of Heyraud U.S. Patent No. 4,677,332.

Kessinger discloses a permanent magnet rotor (11) and a stator (10) having a first coil having a longitudinal section, circumferential sections and a thickness, each of the longitudinal sections (37) of the first coil having a width forming a first curve and a

second curve, the longitudinal sections and circumferential sections of the first coil defining a substantially rectangular opening, and a second coil having a longitudinal sections (37), circumferential sections and thickness, each of the longitudinal sections coil having a width forming the first curve and second curve, the longitudinal sections and circumferential sections of the second coil defining a substantially rectangular opening (33), the widths of the longitudinal sections of the first and second coils being greater than respective thickness of the first and second coils, one of the longitudinal sections of the first coil being at least partially disposed in the rectangular opening (33) of the second coil and one of the longitudinal sections (37) of the second coil being at least partially disposed in the rectangular opening of the first coil. Also discloses the longitudinal sections of the first and second coil having steps bends (32) at each end.

Kessinger disclose the claimed invention except for the width of the first and second coil forming a cylindrical surface. However, Heyraud discloses a curved along a cylinder-segment surface arrangement instead of a flat conductor arrangement is order to provide or create a magnetic flux oriented radially (for example column 5 lines 43-55).

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify Kessinger's invention and provide a cylindrical surface since as disclosed by Heyraud this would had been desirable to provide a magnetic flux oriented radially.

3. Claim 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Kessinger, Jr. et al. U.S. Patent No. 5,744,896, in view of Heyraud U.S. Patent

No. 4,677,332 and in further view of Takahashi et al. U.S. Patent No. 4,551,645.

Kessinger in view of Heyraud discloses the claimed invention except of said first and second coil being connected in serial or parallel. However Takahashi discloses that the connection between coils can exhibit various characteristics by slightly changing the wire connection between parallel and serial (column 11, lines 1-20).

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify Kessinger's invention and provide a parallel or serial connection between the coils since this would have been desirable to exhibit various characteristics as disclose by Takahashi.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2834


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yahveh Comas whose telephone number is (571)272-2020. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YC

  
BURTON S. MULLINS  
PRIMARY EXAMINER